Abstract

Teaching GIS Through a Bio-Regional Perspective
Track: Education
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Three years ago, a small group of high school students in Eastern Massachusetts were offered the chance to learn how to make GIS Maps of their watershed and they jumped at the opportunity. After spending a year studying the surrounding forest and wetland environments, these same students began studying Marine Biology by creating Sea Floor Maps of the Gulf of Marine Bio-Region. This paper presents a high school Environmental Science curriculum that teaches 10th, 11th, and 12th grade students skills in GIS mapping from the perspective of community connections in the Gulf of Maine Bio-Region. In order to create a context for how we used ArcView software we will explain how each student first used topographical maps, UTM roamers, GPS units and then finally ArcView 3 in order to make GIS maps of the land and the sea floor of the Gulf of Maine. Environmental Science is the perfect medium to teach valuable GIS mapping skills within the Bio-Regional context. We believe students will have a better understanding of their local and regional watersheds in addition to being more prepared for future opportunities.

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